Georgia Wing Civil Air Patrol

Aerospace Education END of Year Report

Jan-Dec 1999

Major James McCloud Director of Aerospace Education

Major Roy Good Internal Aerospace Education Officer

Lieutenant Colonel George Harrison

External Aerospace Education Officer

I. INTRODUCTION

The following Aerospace Education Plan of Action for calendar year 1999 for the Georgia CAP Wing is presented. The plan is for the second full year of the new Aerospace Education program. Action: The AE program continues to mature and blossom.

II. MAJOR GOALS

A. Coordinate the Aerospace Education program.

Actions: the coordination efforts increased as the program grows

B. Maintain the partnerships with Cadet programs, DDR, Operations, Emergency Services and Senior programs to coordinate activities and enhance opportunities for Aerospace.

Actions: Strong partnerships have been formed and been maintained with the other Directorates

C. Combine traditional Aerospace Education with modern Information Technology. Enhance communications methods using the Internet Web technology and Email services.

Actions: Email and WEB technologies are now the primary communications tools in Georgia Wing

D. Emphasize extending the program to a broader segment of Senior members to support the level of operations generated by the Aerospace Education program.

Actions: The AEPSM seminar has been attached to every SLS in GA Wing this past year. The Seniors are receptive to AE and the combination of training reduces the logistical issues to a single weekend per quarter.

III. STAFFING

A. A highly qualified Wing Aerospace Education staff has been recruited and is providing coordinated leadership for the Aerospace Education program.

Action: GA Wing Glider Operations, Captain Charlie Meason, has been included with the AE program

B. Action Officers who are AE subject matter experts have been appointed to coordinate the individual AE program elements. The decentralization of program elements has greatly improved the acceptance of the new AE program.

Action: The squadron AEO also perform the Action officer duties when required at an activity

C. Group AEO appointments will be determined by the Group Commanders and the DAE to support the Aerospace Education activities within the group area of operations, both Internal and external.

Action: Group 2 and Group 3 had active Group AEO's. The other Group AE activities continued to be squadron based.

D. Squadron AEO officer appointments will continue to be fully staffed by qualified officers, or else by the Commander when no suitable officer is available.

Action: Squadron Commanders are considered part of the AE program since they provide leadership support of the AE program, in addition to their personal interest in AE.

IV. INTERNAL

The Internal AEO will control and coordinate the Cadet academic program standards, while each activity will have an Action Officer assigned to administer the program. The Senior AE program has been operationally moved to the External side to balance the resources to maximize the program.

Action: There has not been any problems with Seniors supporting External AE

A. Aerospace Education Communications

The Georgia Wing Aerospace Education program will develop and support a series of Web pages that defines the AE program. This is a critical component of delivering the program to both Cadets and Seniors in a timely manner. The Web site will be used in conjunction with the Wing-wide email system to provide timely and complete communications.

Actions: The prototype static WEB page has been developed and scrapped in favor of a more interactive WEB page to also collect AE reporting information dynamically. This delays the WEB page introduction.

B. Cadet AE Program

1. Flight of Discovery and Aerospace 2000

The AE textbook will provide the standard base of information during the year for the majority of Cadets. The AE 2000 activities will be used to augment the academics. The AE program is designed to be completed in a 12-month cycle, although regular progress in advancement for a Cadet will be quarterly. The FOD study plans are now on the WEB site and increasing support of the academics will rely upon internet access.

Action: The flight of Discovery chapters can be done in a group seminar for cadets. The chapter study guides are online via the WEB. The AE tests have become less of a dissatisfier with the emphasis on AE, more cadets are taking and passing the tests with the increase in Cadet AE knowledge. The use of the Cadet chain-of-command to reinforce the teamwork and mutual support also is a major factor in cadet learning

2. Information Technology for Aerospace Education

The availability of computer-based AE materials creates an opportunity to provide professional quality materials to the Cadets at minimum incremental cost. The development of computer-based materials is very time consuming, however, once done, it can be replicated across to all squadrons at minimal cost.

The Cadets have access to Web capable computers at their schools, so it is reasonable to place an increasing portion of the informational content of the program on computers and the Web. The objective is to provide a prototype computer-based AE program that enhances and complements the existing AE program.

Actions: This will be the major enhancement during 2000, it was delayed due to lack of time resources during 1999.

3. Aerospace Education Field Training Exercises (AE FTX)

The Cadet academic requirement for studying the Aerospace chapters can be met by combining squadron based study groups with an enjoyable activity. Each Group will sponsor a quarterly weekend Field Training Exercise AE FTX) at a suitable airport with facilities to allow studying. A team of qualified AEO's will present the selected AE chapter in a concentrated manner, so that the Cadets are exposed to the entire chapter concepts in a single weekend. The team oriented study sessions and the common objective of passing a chapter Aerospace Exam motivates the Cadets to work together. Once the Cadets pass the exam, then a combined Group Orientation flyday, or other appropriate activity can be initiated to make the weekend a positive experience. The score for the weekend experience for each Cadet is: Pass an Aerospace test, have a weekend activity, participate in a Cadet Orientation flight. The initial objective is to hold at least 2 AE/FTX to work out the procedures and logistics prior to each Group sponsoring a quarterly AE/FTX.

Actions: Numerous AE FTX were held throughout the Wing as the concept of AE being activity based permeates through the Wing. The cadet retention is up from 32% in 1998, to 44% during 1999. Visits and trips around the state and country are greatly contributing to cadet motivation.

Action: At Sun n fun airshow in Florida, there were more Georgia Cadets than Florida cadets at the airshow!

4. Objectives for the level of Participation in AE Activities

The AE program has set some general levels of participation to measure the effectiveness of program delivery. These percentages apply to each activity in the elements of the AE program, such that while a Cadet may not participate in all of the program elements, they will have participated in at least some of the activities.

•	Groups:		100%
•	Squadron	100%	
•	1 st Year C	100%	
•	Basic	Cadets (age 12-14):	90%
•	Primary	Cadets (age 14-16):	90%
•	Advanced Cadets (age 16-18):		80%
•	Orientatio	50%	

Action: Participation is difficult to measure without specific reporting requirements.

5. Cadet Flying School

The opportunity for flying an aircraft is a major reason that Cadets join the CAP. The Aerospace Education program recognizes that a unique opportunity to reach Cadets is presented during and around Cadet flight operations. In partnership with Cadet programs and Operations, the Aerospace Education program will sponsor the Cadet Flying School.

Elements of the School include:

- Airplane Cadet Orientation
- Glider Cadet Orientation
- Flight Encampments

- Flight Scholarships
- Private Pilot Ground School
- Primary Flight Training

The importance to the Cadets and the Aerospace mission cannot be overstated. The integration of Cadet flying with the Aerospace Education is the unique program that the CAP can offer to young citizens. The objective is to introduce all of the Cadets to the flight experience and to reach a readiness level of at least 80% for all Cadets.

Actions: Cadet flying is very active. This is the cornerstone of motivating cadets and providing the vehicle to maintain motivation in AE.

Action: 517 Cadet Orientation flights completed in 1999 listed in CAPWATCH 24 DEC99. This is regarded as quite under-reported based upon our observations and the aircraft hours this year.

Action: There were approximately 100 Glider orientation flights, only 53 are recorded in the DBMS. This has a negative financial impact upon the program. A total of some 700 glider flights were conducted during 1999.

Action: The National Glider Flight academy was held at Pine mountain, GA. There were over 500 glider flights, with 20 "supervised" solos (CFI in aircraft). The maximum effort day launched over 100 flights, with the DAE as launch chief.

Action: The Ga Glider program received a 2nd Glider, at the end of the year, each glider has approximately 100 hours durnig 1999, a total of 200 hours of cadet flights. Action: there were 6 Cadets who obtained the Glider Private pilot certificate during 1999, as well as 7-8 solo pilots, both airplanes and gliders, and the 20 "supervised" solos.

Action: Cadet orientation and flight training has continued to be a major effort in Georgia wing. The average delay time between a cadet joining and their first flight has been reduced from 6 months in 1997, to 2.25 months in 1999.

6. Military Airlift Transport Orientation Flights

The USAF MAT flights offer a unique Aerospace Education experience for Cadets to motivate them towards understanding the complexity of the military airlift mission. The Cadets that have participated in a recent MAT flight are much more interested in the CAP and the AE program experience. The objective is to provide all Cadets an equal opportunity to experience a MAT flight during the 1999 year. Each flight will be organized and conducted as a multi-squadron AE mission, with a written OPS plan, news article and an after-action report.

Action: Several Airlifts (estimated 4) were conducted throughout the year. The availability of airlift was limited due to USAF global commitments.

7. Model Rocketry Program

The Model Rocketry program is a well-established program that has will be revived in Georgia. There will be Group and Wing sponsored rocket competitions to allow Cadets to earn the model Rocketry badge and to supplement the AE academic program. An Action Officer has been appointed to provide direction and technical support for the model rocket contests. The Model Rocket contest is targeted towards the New and Basic Cadets.

Action: A Wing Model Rocketry meeting was planned and help at Monroe, GA municipal park. The process was worked out and the rockets were launched. This will become a regular event during the coming year.

V. EXTERNAL

The Senior segment of the AE program was transferred to the External AEO during 1998 for several positive reasons. The overall goal of supporting External AE is supported by increasing the participation of Senior members in AE. There is a need to focus on developing and maintaining a program that is relevant that in interesting for Senior members.

A. Senior AE Program

The Senior AE program is delivered in partnership with the Senior programs Directorate to simplify the logistics of quarterly training weekends, as well as to identify Aerospace Education training as part of the Senior member training experience. The Senior training will be centered around the Group level to minimize coordination difficulties.

1. Yeager Award Review and Testing (AEPSM)

The Group External AEO will provide support AEPSM review and testing in each group for Senior members who have studied for the Yeager Award. This review and testing will be coordinated with the Senior Training Weekend program to allow maximum participation among the Senior members.

Action: The AEPSM was conducted as a review and test seminar this year, it was also offered at each SLS training seminar. The 3 AEPSM seminars produced 48 Yeager awards, of which 42 are credited in the CAPWATCH.DB.

2. Cadet Orientation Pilot Syllabus Seminar

The Group External AEO will provide Orientation pilot syllabus review opportunities around the state for Senior members participate in the Cadet Orientation flight program. The flight and ground syllabus review will be coordinated with the Senior Training Weekend program to allow maximum participation among the Senior members. *The objective is to standardize the flight experience profiles* and to improve the quality of the Cadet Orientation flight experience in 1999.

Action: There has been a standards and evaluation effort to standardize the cadet orientation flight program and to increase pilot qualifications..

Action: Dr. Gleim donated an additional 900 aviation textbooks for the cadets in Georgia Wing. This allows each cadet to have current aviation materials and FAA private pilot written test questions and answers to supplement their AE materials.

3. AEO Training Workshops

The Group External AEO will provide AEO training (215-TSM) training, review and testing opportunities around the state for Senior members who have studied for the AEO rating. This AEO training review and testing will be coordinated with the Senior Training Weekend program schedule to allow maximum participation among the Senior members.

The objective is to produce 60 new AEO ratings or upgrades in 1999 in Georgia Wing. Action: there wass not a wing AEO seminar due to time constraints

4. Commander's Issues in Aerospace Education

The Commander's issues function will be assumed by the appropriate Group AEO. Action: No major issues with AE

5. Women's Issues in Aerospace Education

The Women's issues function will be assumed by the appropriate Group AEO. Action: There were no major issues with AE. The lack of Senior female members has limited the overnight participation of female cadets for some activities. It is important to develop additional female senior members who are interested in participating with cadet AE activities.

B. Objective: To promote Aerospace Education in Georgia by

1. Providing Aerospace education teaching material to educators throughout the state;

Action: the CAP AE material was distributed at every opportunity, including the Wing conference. Approximately 500 lbs of materials were distributed.

2. Recruiting Georgia teachers as Aerospace Education Members of Civil Air Patrol;

Action: The GA AEM membership listing is available to SER, but is not provided in CAPWATCH download.. Unable to verify growth for 1999.

3. Promote teacher attendance at the National Aerospace Conference on Education (NCASE);

Action: Provided awareness and support of NCASE. Internal AEO presented a seminar at NCASE, DAE attended.

4. Developing Aerospace Education Workshops in Georgia

Action: No CAP workshop was held, support for the SCITREK Science center AE program was provided.

Action: Support for various airshows and educational aviation groups was provided throughout the year. Action: NCASE Airlift was not provided due to proximity to GA

Action: Fllight Scholarships were provided for GA cadet attending a flight encampment.

Action: The Wing Commander has offered a \$500 Flight scholarship to a cadet in each group, selected by the group commander.

VI. CONCLUSION

The 1999-year will be an exciting time for the Georgia Aerospace Education program. The program will continue to benefit from the synergy of the combined partnerships with Cadet Program, DDR, Senior Program and Operations.

Action: It was quite exciting all year! An excellent adventure throughout the past 2-1/2 years.

The Georgia Wing Aerospace Education program intends to concentrate of finding the proper mixture of technology and activities to accomplish the aerospace education mission of Civil Air Patrol.

The major changes for the 1999 Georgia Wing AE program are:

➤ COMMUNICATIONS supported by Internet Technology

Action: Email is now primary means of communications, with squadron WEB AE pages increasing each week. The information revolution is upon us!

- ➤ ACTIVITIES organized at group level where possible to spread the workload Actions: Squadrons host activities and open them up to group or wing cadets.
- > SENIOR MEMBERS emphasized to support the increase in the level of operations
 Action: The Senior members support the AE mission, but still need specific activities to focus their efforts
 on AE. Suggest GPS seminars and satellite seminars.

The program is rapidly maturing in the goal of supporting the Cadets and Seniors in the Georgia Wing. The major challenge is finding the people who are willing spend the time flying and working with others to deliver the benefits of the program. The major challenge is to find the level of operations that can be sustained in a volunteer organization with limited funding of operations.

Action: The logistical cost in time and money limits the level of activity, weekday activities are limited by the number of CAP volunteers who can take off from work.

The motto of the Georgia Wing Aerospace Education program has consistently been our foundation of all policy: "If it isn't fun, we're not doing it!"

The definition and growth trajectory of the Aerospace Education program can be described by the following table to show the sequence of emphasis for each year. While each segment of the program is interrelated, it is important to concentrate on the foundation before boosting the next stage.

PROGRAM	DEFINE	LAUNCH	BOOST	BLOSSOM
CADET AE	mid-97	mid-97	1998	1999
SENIOR AE	mid-97	mid-97	1999	2000
EXTERNAL AE	mid-97	mid-97	2000	2001

GEORGIA WING AE AWARDS:

1999 AE PROGRAM 2nd place SER, 2nd place National

BREWER – Cadet - John Rudio
 BREWER – Senior - John Tuccia

BREWER – Organization

John Tucciarone Gleim Publications

BREWER – IndividualAEO of the Year

- Jack Bossarge- Roy Good

AE Award

- Jim McCloud

For the Commander,

Major James McCloud Director of Aerospace Education Georgia Wing, Civil Air Patrol